DOCUMENT RESUME

ED 183 292 PS 011 289

AUTHOR Gash, Hugh
TITLE Class Inclusion and Role-Taking: Structural Mediation.
PUB DATE Apr 80
NOTE 8p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 7-11, 1980)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Children; *Egocentrism; Elementary Education; Elementary School Students; Foreign Countries; *Logical Thinking; *Perspective Taking
IDENTIFIERS *Class Inclusion; Ireland

ABSTRACT

The mediational linkage between class inclusion and role-taking skills was investigated by studying the effects of a successive perspective-taking training technique on the consolidation of class inclusion structures. Sixty preoperational Irish boys were given two pretest measures of class inclusion and two of role-taking. They were then grouped into one of 3 conditions: role-taking training, class inclusion training, or the control group. Subjects in the role-taking training group were given Flavell's cartoon role-taking task (Flavell et al., 1968, task 1D). At each of three points in the cartoon story the subjects were asked to imagine three possible outcomes. Subjects in the control group were read a story. The mean posttest scores of the training groups were significantly superior to those of the control group for both role-taking and class inclusion. The fact that subjects trained in perspective taking improved in class inclusion lends support to the Piagetian notion of structures d'ensemble. (Author/SS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED183292

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Class inclusion and role-taking: structural mediation

HUGH GASH. St. Patrick's College, Dublin, Ireland

California State University, Chico

Paper prepared for the

American Educational Research Association meeting

in Boston, April 1980

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Hugh Gash

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS011289

Abstract

The subjects were sixty preoperational Irish boys. A random half of the subjects were trained on role-taking by successively imagining different perspectives. Mean posttest scores of the trained subjects were significantly superior to those of controls for role-taking scores (assessed with cartoons following Flavell (1968, task 1D)) and for class inclusion scores. This present study, using a new technique for improving role-taking performance, replicates the findings of an earlier disequilibrium based training study in which it was concluded that this form of role-taking includes the mental operations necessary to class inclusion.

Class inclusion and role-taking: structural mediation

Piagetian theory postulates interrelation between the concrete operational structures necessary to understanding (1) logicomathematical problems and (2) social role-taking tasks. Hollos (1975) has suggested that these two different sets of emerging structures may be more conceptually separate. In the present study cartoons were used to assess role-taking following Flavell (1968, task 10). Subjects first described a cartoon sequence: Then they were asked how another would reconstruct the story if shown only part of the sequence. Egocentric responses were those in which information privileged to the subject is attributed to the 'other'. There are three sorts of reasons for arguing that role-taking of this type requires class inclusion structure.

First and a priori, decentered responding requires (1) classification of cartoon content into (a) privileged meanings and (b) alternative meanings, and (2) coordination of such classifications in the production of responses.

Second and a posteriori, prior studies have now clearly established a developmental sequence, class inclusion then role-taking, within and across grade levels in the US (Gash & Smock, in press), in India (Behl & Gash, in press), and in Ireland and France (Gash, 1979).

Third and more conclusively, Gash (1979) has shown that subjects trained by disequilibrium producing techniques on role-taking also significantly augmented their class inclusion scores; the subjects trained on class inclusion did not increase their role-taking scores beyond chance levels.

That training study (Gash, 1979) strongly implies mediational linkage between class inclusion and this type of role-taking. The

implication being that this form of role-taking includes the structures necessary to class inclusion. Yet if it is correct to infer such mediational linkage then a change in the technique by which role-taking is trained should not eradicate the gain in class inclusion scores. The disequilibrium based techniques used in Gash (1979) were designed to provide opportunities for subjects to realize that the understanding of the cartoon, possessed by the 'other', was different. Alternatively role-taking skills might be trained by providing subjects with a number of opportunities to generate different perspectives which the 'other' might conceivably construct. The major purpose of this present study is to see whether this latter type of training technique, which can be called successive perspective taking, is effective in consolidating class inclusion structures.

Method

Design

The experiment consisted of three individually administered phases: pretest, treatment, and posttest. The pretest was the same for all the subjects and consisted of two measures of class inclusion and two of role-taking; the posttest also was the same for all subjects and was made up of two different class inclusion items and two different role-taking items. The measures were counterbalanced across subjects. On each item class inclusion scores were two (correct, with or without justification) or one (incorrect); role-taking scores were two (decentered) or one (egocentric). Subjects scoring one on at least one class inclusion item on the pretest were retained and assigned randomly to one of two treatment groups. In the control group subjects were read a story. In the perspective taking training group the role-taking task was explained to the subjects, and then

at each of three points in a story subjects were asked to imagine three possible outcomes.

Subjects

A total of 130 Irish boys in a lower-middle class urban school were pretested and 60 failed at least one class inclusion item and so were retained in the sample (average age six years five months, range five years eleven months to eight years six months).

Results

The two treatment groups were approximately equal on their pretest class inclusion and role-taking scores (see Table 1). Comparison of the effectiveness of the treatment therefore, was made by comparing the means of the control and trained groups on their posttest scores. The mean posttest score of the trained group was significantly superior to that of the control group for both role-taking $t(58)=2.57$, $p < .01$, and class inclusion $t(58)=1.93$, $p < .05$.

Table 1

Pretest and posttest mean scores

	Pretest	Posttest
Control group		
Class inclusion	2.43	2.57
Role-taking	2.76	2.47
Treatment group		
Class inclusion	2.50	3.03
Role-taking	2.73	3.03

Conclusion

The Piagetian stage concept has recently received an extensive discussion (Brainerd, 1978 - followed by 26 discussants). Central to this

debate is whether different behaviors which are manifestations of the same underlying structures are demonstrably related to one another. The theoretical significance of this present study consists in the light it sheds on this issue, because it is shown here that training subjects on role-taking by a method of successive perspective taking consolidates their class inclusion structures. The cross-over effect from teaching role-taking to learning class inclusion, therefore, is not dependent on the disequilibrium based technique employed in Gash (1979). Cross-over effects of this type are evidence for Piaget's structures d'ensembles.

References

Behl, K.; & Gash, H. Role-taking skills and classification abilities in India. Journal of Genetic Psychology, in press.

Brainerd, C. J. The stage question in cognitive developmental theory. Behavioral and Brain Sciences. 1978, 2, 173-182.

Flavell, J. H. The development of role-taking and communication skills in children. New York: Wiley, 1968.

Gash, H. Class inclusion then role-taking: A sequence? Paper presented at the biennial meeting of the Society for Research in Child Development, San Francisco, March 1979.

Gash, H.; & Smock, C. D. Development of social relations: Role-taking skills and classification abilities. Journal of Genetic Psychology, 1979, 135, 115-127.

Hollos, M. Logical operations and role-taking abilities in two cultures: Norway and Hungary. Child Development, 1975, 46, 638-650.